WHAT IS CLAIMED IS:

1. A sorbent composition suitable for removing sulfur from a hydrocarbon-containing fluid, said sorbent composition comprising:

a support;

a promoter; and

a silicate.

2. A sorbent composition according to claim 1 wherein said support comprises zinc oxide.

3. A sorbent composition according to claim 2 wherein said promoter comprises a metal selected from the group consisting of nickel, cobalt, iron, manganese, copper, zinc, molybdenum, tungsten, silver, tin, vanadium, antimony, and combinations thereof.

4. A sorbent composition according to claim 3 wherein said silicate includes a metal component selected from the group consisting of sodium, potassium, zirconium, aluminum, barium, beryllium, calcium, iron, magnesium, manganese, and combinations thereof.

5. A sorbent composition according to claim 4 wherein said promoter comprises a reduced-valence promoter.

6. A sorbent composition according to claim 1 wherein said support comprises zinc oxide, silica and alumina.

7. A sorbent composition according to claim 6 wherein said promoter comprises reduced-valence nickel.

8. A sorbent composition according to claim 7 wherein said silicate is sodium silicate.

9. A sorbent composition according to claim 8 wherein said sorbent composition comprises said zinc oxide in an amount in a range of from about 10 to about 90 weight percent, said silica in an amount in the range of from about 5 to about 85 weight percent, said alumina in an amount in the range of from about 1 to about 30 weight percent, said reduced-valence nickel in an amount in the range of from about 0.5 to about 50 weight percent, and said sodium silicate in an amount in the range of from about 1 to about 40 weight percent.

10. A sorbent composition according to claim 9 wherein said reduced-valence nickel has a valence of less than 2.

11. A sorbent composition as claimed in claim 1 wherein said promoter comprises at least 10 weight percent reduced-valence nickel, said reduced-valence nickel having a valence of zero.

12. A sorbent composition according to claim 1 wherein said sorbent composition comprises a microsphere having a mean particle size in the range of from about 1 micrometer to about 500 micrometers.

13. A sorbent composition according to claim 1 wherein said sorbent composition has a Davison Index value of less than 20 percent.

14. A process of making a sorbent composition comprising:

(a) admixing a first support component and a second support component to form a support mix;

(b) particulating said support mix to thereby provide a support particulate;

(c) contacting said support particulate with a promoter to thereby provide a promoted particulate comprising an unreduced promoter;

(d) reducing said promoted particulate to thereby provide a reduced particulate comprising a reduced-valence promoter; and

(e) incorporating a silicate with a silicate-enhanced component selected from a group consisting of said support mix, said support particulate, said promoted particulate, and combinations thereof.

15. A process according to claim 14 wherein said silicate includes a metal component selected from the group consisting of sodium, potassium, zirconium, aluminum, barium, beryllium, calcium, iron, magnesium, manganese, and combinations thereof.

16. A process according to claim 15 wherein said promoter is selected from the group consisting of metals, metal oxides, and combinations thereof.

17. A process according to claim 16 wherein said first support component comprises zinc oxide.

18. A process according to claim 17 wherein said reduced-valence promoter has a valence which is less than the valence of said unreduced promoter.

19. A process according to claim 18 wherein said silicate-enhanced component is said support mix.

20. A process according to claim 19 wherein said silicate is

incorporated with said support mix by physically mixing said silicate and said support mix.

21. A process according to claim 18 wherein said silicate-enhanced component is said support particulate.

22. A process according to claim 21 wherein said silicate is incorporated with said support particulate by impregnating said support particulate with said silicate.

23. A process according to claim 18 wherein said silicate-enhanced component is said promoted particulate.

24. A process according to claim 23 wherein said silicate is incorporated with said promoted particulate by impregnating said promoted particulate with said silicate.

25. A process according to claim 14 wherein said silicate comprises sodium silicate.

26. A process according to claim 25 wherein said promoter comprises nickel.

27. A process according to claim 26 wherein said support mix comprises zinc oxide, silica, and alumina.

28. A process according to claim 27 wherein said reduced-valence promoter comprises reduced-valence nickel.

29. A process according to claim 28 wherein said reduced-valence nickel has a valence of less than 2.

30. A process according to claim 29 wherein said support mix is in the form of a slurry, wherein said slurry is particulated by spray-drying, wherein said support particulate is in the form of a microsphere having a mean particle size in the range of from about 1 micrometer to about 500 micrometers.

31. A process as claimed in claim 29 wherein said silicate-enhanced component is said support mix.

32. A process according to claim 31 wherein said silicate is incorporated with said support mix by physically mixing said silicate and said support mix.

33. A process according to claim 29 wherein said silicate-enhanced component is said support particulate.

34. A process according to claim 33 wherein said silicate is incorporated with said support particulate by impregnating said support particulate with said silicate.

35. A process according to claim 29 wherein said silicate-enhanced component is said promoted particulate.

36. A process according to claim 35 wherein said silicate is incorporated with said promoted particulate by impregnating said promoted particulate with said silicate.

37. A process according to claim 14 wherein said sorbent composition comprises zinc oxide in an amount in the range of from about 10 to about 90 weight percent, silica in an amount in the range of from about 5 to about 85 weight

percent, alumina in an amount in the range of from about 1 to about 30 weight percent, reduced-valence nickel in an amount in the range of from about 0.5 to about 50 weight percent, and sodium silicate in an amount in the range of from about 1 to about 40 weight percent.

38. A process according to claim 37 wherein said reduced-valence nickel has a valence of zero.

39. A process according to claim 38 wherein said support particulate is dried and calcined prior to contacting with said promoter, and wherein said promoted particulate is dried and calcined prior to reduction.

40. A process according to claim 39 wherein said silicate-enhanced component is said support mix.

41. A process according to claim 40 wherein said silicate is incorporated with said support mix by physically mixing said sodium silicate, said zinc oxide, said silica, and said alumina.

42. A process according to claim 39 wherein said silicate-enhanced component is said support particulate.

43. A process according to claim 42 wherein said silicate is incorporated with said support particulate by spray-impregnating said support particulate with said sodium silicate.

44. A process according to claim 39 wherein said silicate-enhanced component is said promoted particulate.

45. A process according to claim 44 wherein said silicate is

incorporated with said promoted particulate by spray-impregnating said promoted particulate with said sodium silicate.

46. The product produced by the process of claim 14.

47. The product produced by the process of claim 39.

48. A process for removing sulfur from a hydrocarbon-containing fluid stream, said process comprising the steps of:

(a) contacting said hydrocarbon-containing fluid stream with a sorbent composition comprising a support, a promoter, and a silicate in a desulfurization zone under conditions such that there is formed a desulfurized fluid stream and a sulfurized sorbent;

(b) separating said desulfurized fluid stream from said sulfurized sorbent;

(c) regenerating at least a portion of the separated sulfurized sorbent in a regeneration zone so as to remove at least a portion of the sulfur therefrom and provide a desulfurized sorbent;

(d) reducing said desulfurized sorbent in an activation zone to provide a reduced sorbent composition which will affect the removal of sulfur from said hydrocarbon-containing fluid stream when contacted with the same; and

(e) returning at least a portion of said reduced sorbent composition to said desulfurization zone.

49. A process in accordance with claim 48 wherein said support comprises zinc oxide, silica, and alumina.

50. A process in accordance with claim 49 wherein said promoter comprises nickel.

51. A process in accordance with claim 50 wherein said silicate comprises sodium silicate.

52. A process in accordance with claim 48 wherein said contacting is carried out at a temperature in the range of from about 100°F to about 1000°F and a pressure in the range of from about 15 to about 1500 psia.

53. A process in accordance with claim 48 wherein said regeneration is carried out at a temperature in the range of from about 100°F to about 1500°F and a pressure in the range of from about 25 to about 500 psia.

54. A process in accordance with claim 53 wherein there is employed air as a regeneration agent in said regeneration zone.

55. A process in accordance with claim 48 wherein said desulfurized sorbent is subjected to reduction with hydrogen in said activation zone which is maintained at a temperature in the range of from about 100°F to about 1500°F and a pressure in the range of from about 15 to about 1500 psia during reduction.

56. A process in accordance with claim 48 wherein the separated sulfurized sorbent is stripped prior to introduction into said regeneration zone.

57. A process according to claim 48 wherein said desulfurized sorbent is stripped prior to introduction into said activation zone.

58. A process in accordance with claim 48 wherein said promoter

comprises reduced-valence nickel having a valence of less than 2.

59. A process in accordance with claim 48 wherein said promoter comprises reduced-valence nickel having a valence of zero.

60. A process in accordance with claim 48 wherein said hydrocarbon-containing fluid stream is cracked-gasoline.

61. A process in accordance with claim 48 wherein said hydrocarbon-containing fluid stream is diesel.

62. The product produced by the process of claim 60.

63. The product produced by the process of claim 61.